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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,590	07/17/2003	Ji-Bum Kim	P-0520	9299
34610	7590	06/15/2004	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			FISHMAN, MARINA	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/620,590	KIM, JI-BUM	
	Examiner	Art Unit	
	Marina Fishman	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

General status

1. This is a First Action on the Merits. Claims 1 - 14 are pending in the case and are being examined.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “moving part of the VCR” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of

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any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 – 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 lines 6 and 7, Applicant should clarify structure of “wherein the rotor configured to be engaged to a moving part of the VCR such that the rotor is rotated to different orientations depending on the operating mode of the VCR.”

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 4 – 6, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Song et al. [US 5,408,275].

Song et al. disclose a device [Figures 5 and 12] comprising:

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- a main printed circuit board [17] having a contact point [18 – 20] mode pattern exposed on an upper surface thereof;
- a rotor [26] rotatably mounted on the main printed circuit board and having brushes [21 – 23], wherein the brushes contact the contact point mode pattern [Column 6, 15 – 24].

Regarding limitation “wherein the rotor configured to be engaged to a moving part of the VCR such that the rotor is rotated to different orientations depending on the operating mode of the VCR.” The rotor [26] of Song et al. is capable of being configured to be engaged to a moving part of VCR, hence the reference satisfies the limitations of the claim.

Regarding Claims 4 and 6, Song et al. disclose the brushes arranged substantially along a radial line of the rotor and the contact point mode pattern comprises a plurality of concentric rings of conductive patterns formed on the upper surface of the main printed circuit board [Figures 5 and 12].

Regarding Claim 5, Song et al. disclose the contact point mode patterns are arranged so that when the rotor is arranged in different rotational orientations, different portions of the contact point mode pattern will be electrically coupled to each other.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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8. Claims 1, 3 – 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimizu et al. [US 4,922,063].

Shimizu et al. disclose a switch device [Figures 1 and 2a-c] comprising:

- a main printed circuit board [11] having a contact point mode pattern exposed on an upper surface thereof [Figures 1, 2a];
- a rotor [6] rotatably mounted on the main printed circuit board and having brushes [5a-5d, 15a – 15d], wherein the brushes contact the contact point mode pattern.

Regarding limitation “wherein the rotor configured to be engaged to a moving part of the VCR such that the rotor is rotated to different orientations depending on the operating mode of the VCR.” The rotor [6] of Shimizu et al. is capable of being configured to be engaged to a moving part of VCR, hence the reference satisfies the limitations of the claim.

Regarding Claim 3, Shimizu et al. disclose the circuit board with conductive patterns on both surfaces [Figure 2c].

Regarding Claims 4 and 6, Shimizu et al. disclose the brushes arranged substantially along a radial line of the rotor [Figure 1] and the contact point mode pattern comprises a plurality of concentric rings of conductive patterns formed on the upper surface of the main printed circuit board [Figures 1 and 2a].

Regarding Claim 5, Shimizu et al. disclose the contact point mode patterns are arranged so that when the rotor is arranged in different rotational orientations, different

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portions of the contact point mode pattern will be electrically coupled to each other [Column 2, lines 5 – 55].

Regarding Claims 7 and 8, Shimizu et al. disclose all of the brushes is electrically coupled to one another and the each of the brushes corresponds to a different ring of the conductive patterns.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Song et al. [US 5,408,275] in view of Schmidt et al. [US 5,546,067].

Regarding Claim 2, Song et al. disclose the circuit board [17] with engaging hole for engaging the rotor [26; Figures 5 and 12], however do not disclose an engaging hook. Schmidt et al. disclose rotor [40] with hook [63]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the rotor with the hook in Song et al., as suggested by Schmidt et al., in order to provide secure engagement between two elements.

11. Claims 9 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Song et al. [US 5,408,275] and Shimizu et al. [US 4,922,063]. in view of Schmidt et al. [US 5,546,067].

Regarding Claims 9 – 14, Song et al. and Shimizu et al. in view of Schmidt et al. disclose the instant claimed invention except for a plurality of brushes are being mounted on the circuit board. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the plurality of brushes on the circuit board, since it has been held that rearranging parts of an invention involves only routine skill in the art. [In re Japikse, 86 USPQ 70.]

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Fishman whose telephone number is 571-272-1991. The examiner can normally be reached on 7-5 M-T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

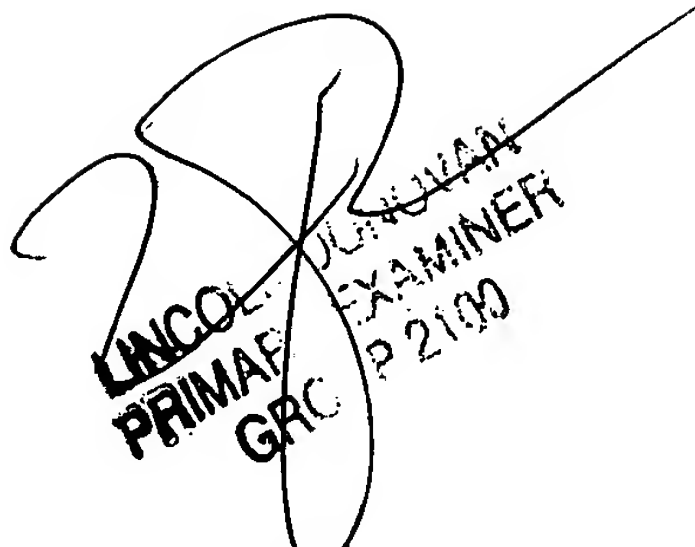
Marina Fishman

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June 3, 2004


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